## **AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

## **LISTING OF THE CLAIMS**

- 1. (Previously Presented) A method for inhibiting spontaneous myometrial contraction or bradykinin-induced contraction, comprising administering to the patient in need of treatment, a therapeutically effective amount of adrenomedullin.
- 2. (Previously Presented) A method for selectively inhibiting spontaneous myometrial contraction or bradykinin-induced contraction comprising the step of administering to a patient in need of treatment, a therapeutically effective amount of adrenomedullin.
- 3. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to prevent for preventing premature labor, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.
- 4. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to prevent for preventing miscarriage, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.
- 5. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to arrest for arresting parturition prior to cesarean section, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.

- 6. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to treat for treating dysmenorrheal, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.
- 7. (Previously Presented) A method according to claim 1 or 2, wherein the adrenomedullin is:
  - (a.) a peptide comprising an amino acid sequence from Ser in position13 to Tyr in position 52 of SEQ ID NO: 2; or
  - (b.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (a), and having an action of inhibiting myometrial contraction.
- 8. (Currently Amended) A method according to claim [[7]]1 or 2, wherein the adrenomedullin is:
  - (c.) a peptide comprising an amino acid sequence from Tyr in position1 to Tyr in position 52 of SEQ ID NO: 2; or
  - (d.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (c), and having an action of inhibiting myometrial contraction.
  - 9. (Currently Amended) A method according to claim [[8]]1 or 2, wherein the adrenomedullin is:
    - (e.) a peptide comprising an amino acid sequence from Ala in position -73 to Tyr in position 52 of SEQ ID NO: 2; or
    - (f.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (e), and having an action of inhibiting myometrial contraction.

- 10. (Currently Amended) A method according to claim [[9]]1 or 2, wherein the adrenomedullin is:
  - (g.) a peptide comprising an amino acid sequence from Met in position-94 to Leu in position 91 of SEQ ID NO: 2; or
  - (h.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (g), and having an action of inhibiting myometrial contraction.
- 11. (Previously Presented) A method according to claim 1 or 2, wherein the C-terminus of the adrenomedullin is amidated.
- 12. (Previously Presented) A method according to claim 1 or 2, wherein Gly is added to the C-terminus of the adrenomedullin.
- 13. (Previously Presented) A method according to claim 1 or 2, wherein in the adrenomedullin, Cys in position 16 and Cys in position 21 of SEQ ID NO: 2 are crosslinked.
- 14. (Previously Presented) A method according to claim 13, wherein the crosslink is a disulfide bond.
- 15. (Previously Presented) A method according to claim 13, wherein the crosslink is a -CH<sub>2</sub>-CH<sub>2</sub>- bond.
  - 16. (Cancelled).
  - 17. (Cancelled).